

# Notice of Allowability

Application No.

10/826,669

Examiner

Ives Wu

Applicant(s)

DETERT ET AL.

Art Unit

1713

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/2/06.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 5/2/06
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### DETAILED ACTION

(1). Applicants' Amendments, Remarks and Information Disclosure Statement with Foreign priority paper filed on May 2, 2006 have been received and acknowledged.

The objection to the Specification in the prior Office Action dated February 1, 2006 is removed in response to the Applicants' Amendments on the Specification filed on May 2, 2006.

The 112 2<sup>nd</sup> paragraphs rejections of claims 5-7 in the prior Office Action dated February 1, 2006 is removed in response to the Applicants' Amendments on the Specification filed on May 2, 2006.

Claims 8-20 are newly added.

### *Allowable Subject Matter*

Claims 1 - 20 are allowed.

The following is an examiner's statement of reasons for allowance: The closest prior art of the records located or identified by the examiner is Foster et al (WO 91/08281). Foster et al disclose the comb polymer (deflocculating polymer) with linear hydrophilic backbone by polymerizing suitable monomers units of acrylic acid, methacrylic acid (page 3, line 6-25) and sidegroups composed of alkoxy groups, for example butylenes oxide and/or propylene oxide, the sidegroups are connected to backbone via poly ethoxy linkage. Preferred polymers are of formula (I), (Ia) (page 3, line 34 – page 6, line 9). Foster et al teach the sidegroups R<sup>9</sup> and R<sup>10</sup> also representing sulphonate such as -SO<sub>3</sub>Na, -CO-O-C<sub>2</sub>H<sub>4</sub>-O-SO<sub>3</sub>Na; however, lithium is not included in the sulfonic salt group which differs it from applicant's invention as claimed in instant claim 1.

The 2<sup>nd</sup> closest prior art of the records located or identified by examiner is Takebe et al in the Journal of Materials Chemistry, 1994 Title: Synthesis of a New Family of Comb Polymers with side chain esters and their films containing Lithium Trifluoromethane Sulfonate. In Takebe et al disclosure, the comb polymer is disclosed with polyester arms connected to backbone via ester group. The comb polymer is hybridized with LiCF<sub>3</sub>SO<sub>3</sub> but not chemically bonded to the sidearms of comb polymer. The present invention requires that the salts of sulfonic group such NaSO<sub>3</sub>, and LiSO<sub>3</sub> linked to the sidearms of comb polymer. So that the sidearms of comb

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polymer taught by Takebe et al is different from the sidearms of comb polymer invented by applicant.

As of the date of this notice of allowability, the examiner not located or identified any reference that can be used singularly or in combination with another reference including Foster et al to neither suggest nor teach the present invention anticipated or obvious to one of ordinary skill in the art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ives Wu whose telephone number is 571-272-4245. The examiner can normally be reached on 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner: Ives Wu  
Art Unit: 1713  
Date: June 23, 2006

  
DAVID W. WU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700